

FLIGHT SUMMARY REPORT

Flight Number: 97-030
Calendar/Julian Date: 3 January 1997 •003
Sensor Package: Wild-Heerbrugg RC-10
Hycon HR-732
Area(s) Covered: Northern California
Flood Assessment

Investigator(s): Caroline - Calif. Office of Emergency
Services

Aircraft #: 708

SENSOR DATA

Accession #:	05143	05144
Sensor ID #:	020	035
Sensor Type:	HR-732	RC-10
Focal Length:	24" 609 mm	6" 153.46
Film Type:	Aerochrome IR SO-134	Aerochrome IR SO-060
Filtration:	Wratten 12	Wratten + 2.2 AV
Spectral Band:	510-900 nm	510-900 nm
f Stop:	11	5.6
Shutter Speed:	1/250	1/275
# of Frames:	120	54
% Overlap:	30	60
Quality:	Excellent	Excellent
Remarks:	Excellent	Good Fiducials not fully illuminated

Airborne Science and Applications Program

The Airborne Science and Applications Program (ASAP) is supported by three ER-2 high altitude Earth Resources Survey aircraft. These aircraft are operated by the High Altitude Missions Branch at NASA-Ames Research Center, Moffett Field, California. The ER-2s are used as readily deployable high altitude sensor platforms to collect remote sensing and in situ data on earth resources, celestial phenomena, atmospheric dynamics, and oceanic processes. Additionally, these aircraft are used for electronic sensor research and development and satellite investigative support.

The ER-2s are flown from various deployment sites in support of scientific research sponsored by NASA and other federal, state, university, and industry investigators. Data are collected from deployment sites in Kansas, Texas, Virginia, Florida, and Alaska. Cooperative international scientific projects have deployed the aircraft to sites in Great Britain, Australia, Chile, and Norway.

Photographic and digital imaging sensors are flown aboard the ER-2s in support of research objectives defined by the sponsoring investigators. High resolution mapping cameras and digital multispectral imaging sensors are utilized in a variety of configurations in the ER-2s' four pressurized experiment compartments. The following provides a description of the digital multispectral sensor(s) and camera(s) used for data collection during this flight.

Camera Systems

Various camera systems and films are used for photographic data collection. Film types include high definition color infrared, natural color, and black and white emulsions. Available photographic systems are as follows:

- Wild-Heerbrugg RC-10 metric mapping camera
 - 9 x 9 inch film format
 - 6 inch focal length lens provides area coverage of 16 x 16 nautical miles from 65,000 feet
 - 12 inch focal length lens provides area coverage of 8 x 8 nautical miles from 65,000 feet
- Hycon HR-732 large scale mapping camera
 - 9 x 18 inch film format
 - 24 inch focal length lens provides area coverage of 4 x 8 nautical miles from 65,000 feet
- IRIS II Panoramic camera
 - 4.5 x 34.7 inch film format
 - 24 inch focal length lens
 - 90 degree field of view provides area coverage of 2 x 21.4 nautical miles from 65,000 feet

The U.S. Geological Survey's EROS Data Center at Sioux Falls, South Dakota serves as the archive and product distribution facility for NASA-Ames aircraft acquired photographic and digital imagery. For information regarding photography and digital data (including areas of coverage, products, and product costs) contact EROS Data Center, Customer Services, Sioux Falls, South Dakota 57198 (Telephone: 605-594-6151).

Information regarding ER-2 acquired photographic and digital data is available through the Aircraft Data Facility at Ames Research Center. For specific information regarding flight documentation, sensor parameters, and areas of coverage contact the Aircraft Data Facility, NASA-Ames Research Center, Mail Stop 240-6, Moffett Field, California 94035-1000 (Telephone: 415-604-6252).

CAMERA FLIGHT LINE DATA
FLIGHT NO. 97-030

Accession # 05143

Sensor # 020

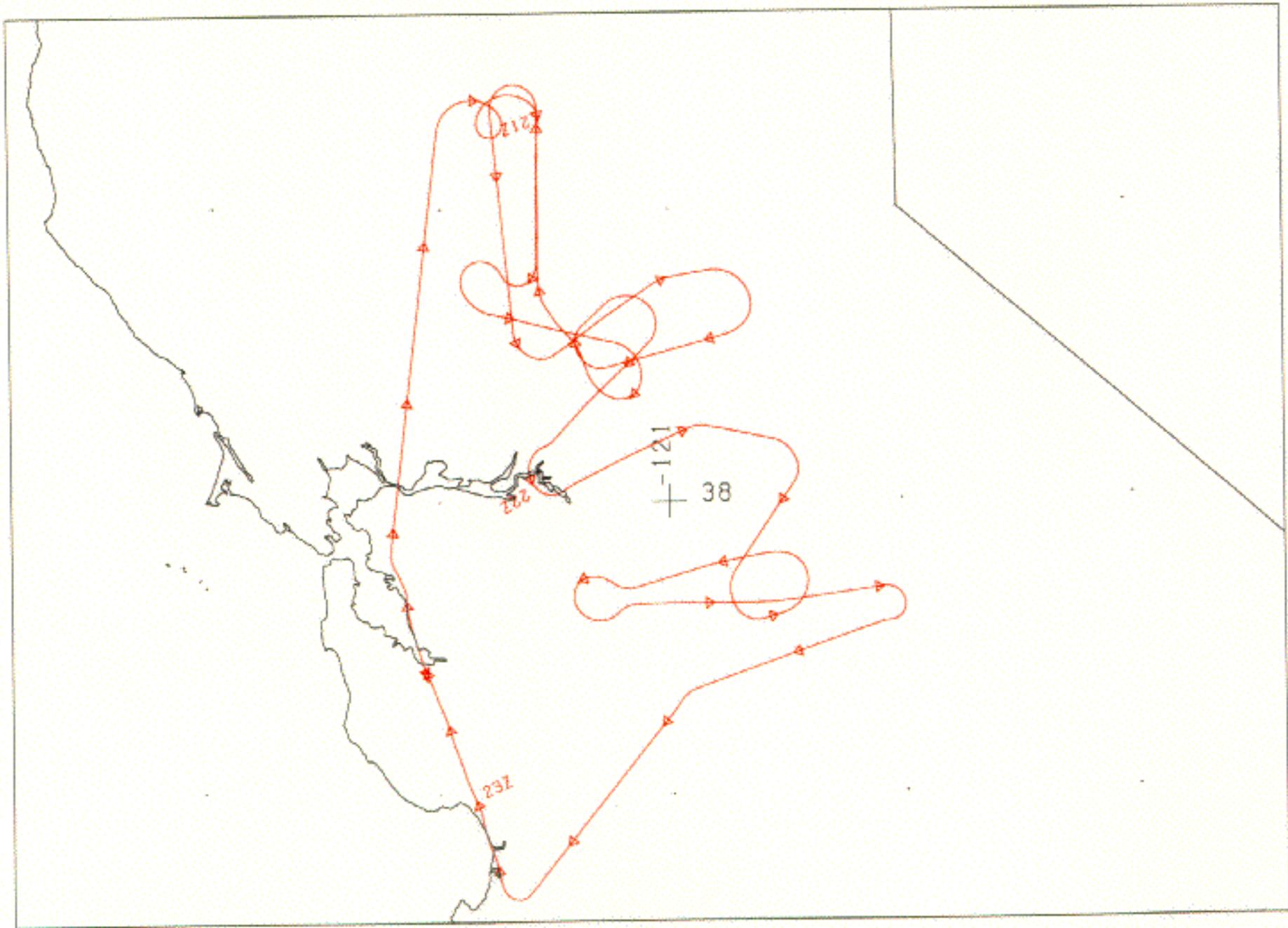
Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	0001-0012	21:01:09	21:04:56	63000/19207	10-30% scattered cumulus (frames 0001-0004); 10% cumulus (frames 0006-0010)
C - D	0013-0021	21:10:41	21:13:25	64500/19665	10-40% scattered cumulus (frs 0014-0021)
B - A	0022-0034	21:21:57	21:26:03	65000/19817	10-20% scattered cumulus (frs 0032-0034)
E - F	0035-0043	21:37:19	21:40:02	63000/19207	10-40% scattered cumulus
G - H	0044-0052	21:46:09	21:48:52	63000/19207	10-30% scattered cumulus
I - J	0053-0063	21:55:04	21:58:28	63000/19207	10-40% scattered cumulus
K - L	0064-0073	22:02:21	22:05:23	63000/19207	10-40% scattered cumulus
M - N	0074-0080	22:10:57	22:12:56	63000/19207	10-20% scattered cumulus (frs 0074-0078)
O - P	0081-0092	22:19:36	22:23:19	63000/19207	10-30% scattered cumulus (frs 0087-0092)
Q - R	0093-0105	22:29:09	22:33:12	63000/19207	10-30% scattered cumulus (frs 0093-0099) 10% cumulus (frames 0104-0105)
S - T	0106-0120	22:38:51	22:43:34	63000/19207	10-20% scattered cumulus (frs 0106-0108)

CAMERA FLIGHT LINE DATA
FLIGHT NO. 97-030

Accession # 05144

Sensor # 035

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - B	1601-1605	21:01:20	21:05:11	63000/19207	20% scattered cumulus
C - D	1606-1609	21:10:54	21:13:47	64500/19665	20-30% scattered cumulus
B - A	1610-1615	21:22:10	21:26:21	65000/19817	10-20% scattered cumulus
E - F	1616-1619	21:37:32	21:40:12	63000/19207	20-40% scattered cumulus
G - H	1620-1623	21:46:22	21:49:01	63000/19207	10-40% scattered cumulus
I - J	1624-1628	21:55:17	21:58:38	63000/19207	10-40% scattered cumulus
K - L	1629-1633	22:02:34	22:05:39	63000/19207	20-30% scattered cumulus
M - N	1634-1636	22:11:10	22:13:03	63000/19207	10-30% scattered cumulus
O - P	1637-1641	22:19:50	22:23:28	63000/19207	10-30% scattered cumulus
Q - R	1642-1647	22:29:22	22:33:26	63000/19207	10-30% scattered cumulus
S - T	1648-1654	22:39:05	22:43:58	63000/19207	10-30% scattered cumulus (frs 1648-1650)

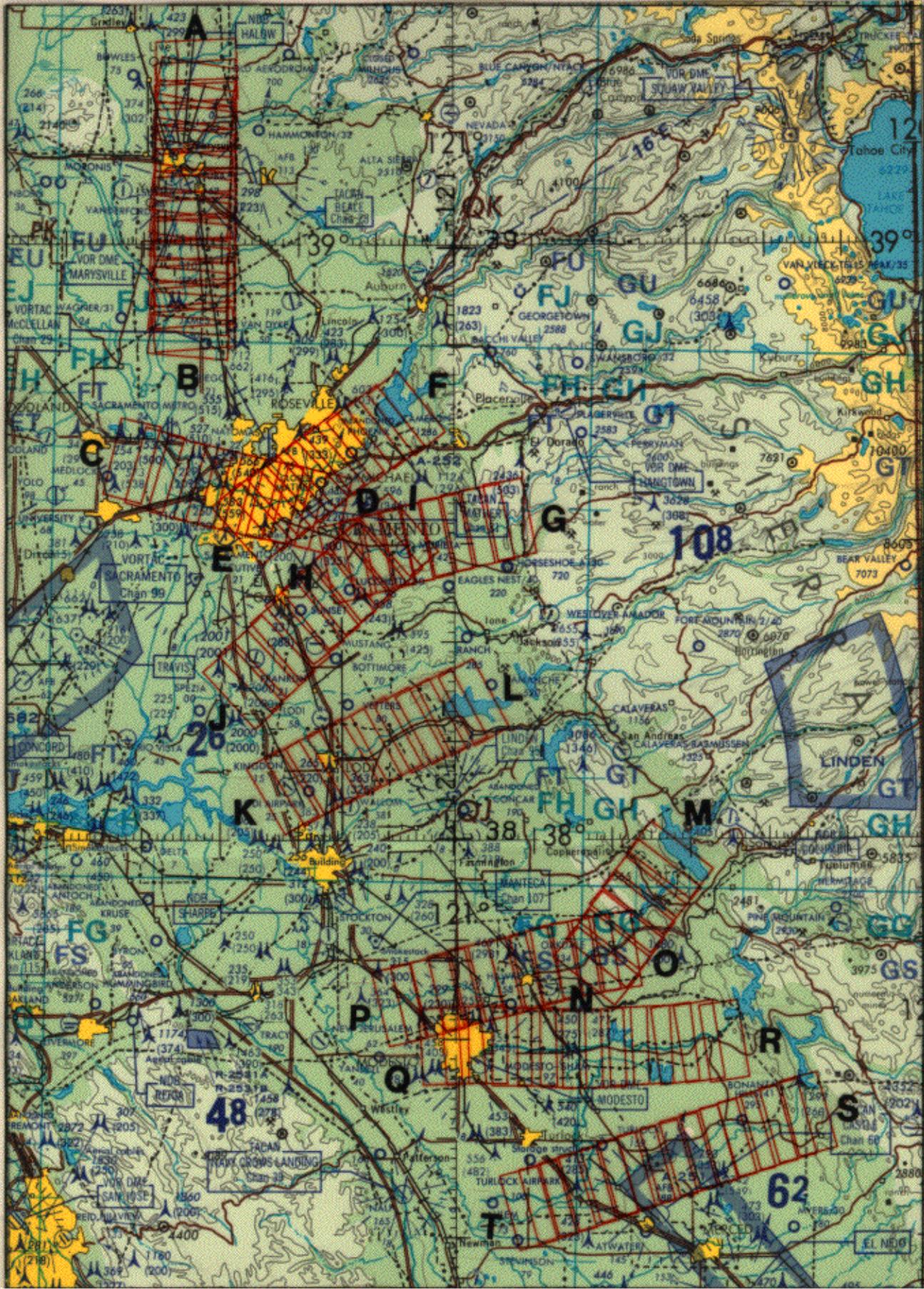


FLIGHT 97-030

3 JANUARY 1997

A/C 708

HR732 / RC-10



ONC G-18

HR-732

R/C 708

3 JANUARY 1997

LIGHT 97-030